THE FACTS: Ethanol, Corn, and Food

Ethanol is big news in the media these days, but it's only a small piece of the global picture of grain, food, and prices. Consider these facts:

1. **Soaring oil prices drive up the cost of all consumer goods, including food.**
2. **Global issues have caused taller demand on a shorter supply of crops.**
3. **Turning corn into ethanol does not remove food from the world marketplace.**
4. **Speculative investment in commodities is causing artificially high crop prices.**

Price Check: Oil vs. Corn

Soaring oil prices drive up the cost of all consumer goods, including food.

- Consumer goods, including groceries, are heavily dependent upon energy for processing, packaging, and transportation – energy derived from expensive oil.
- Oil prices have quintupled since 2002, and the subsequent increase in gasoline prices has cost Americans more than $250 billion annually.
- Diesel prices are up 40% since February, becoming the #1 expense for many in the trucking industry.
- Since 1949 corn prices have increased less than 400%, while oil prices are up more than 4,000%.
- Farm costs, including grain, are less than 20 cents of every food dollar, with the rest of the real cost of food coming from labor, marketing, and transportation.
- Research has found energy prices to have at least twice the impact on the Consumer Price Index for food than corn prices do.

Worldwide supply and demand

Recent global issues have caused taller demand on a shorter supply of crops.

- Corn for ethanol is only about 2% of the worldwide corn market, not a large enough factor to be <u>the</u> cause of the recent dramatic increases in grain prices.
- Worldwide demand for grain is increasing, especially with a growing middle class in places like China and India being able to afford a better diet with more protein.
- The worldwide supply of grain has seen a shortage over the past year with uncooperative weather in places like Australia and the U.S. where droughts and poor harvest conditions shorted the wheat crop.
- According to USDA, the amount of corn used for ethanol is projected to decrease, not increase; the April 2008 World Ag Supply and Demand Estimates (WASDE) shows that total corn usage for ethanol will be down this year by at least 100 million bushels from their March estimate, while animal feed usage of corn will be up by 200 million bushels and corn exports will rise by at least 50 million bushels.

Ethanol is only starch, not protein

Turning corn into ethanol does not remove food from the world marketplace.

- Only the corn kernel's starch is made into ethanol, and all the protein and nutrients are left in tact and returned to the marketplace.
- Distillers grain, the ethanol process' co-product, is a nutritious livestock feed containing the corn's protein.
- Ethanol production creates more livestock feed than would otherwise be available in the marketplace because the corn is fractionated into its useful parts and its nutrients are concentrated.
- The type of corn eaten by people (sweet corn) is not used for ethanol; ethanol uses the type of corn (field corn) that is fed to animals. Only 1 in 10 kernels of corn is used directly as human food.

Playing around in the commodities markets

Speculative investment in commodities is causing artificially high crop prices.

- Speculative investment in the commodities markets is driving up grain prices beyond the increases generated by global supply and demand issues.
- A recent flood of speculation in the commodities markets is increasing price volatility in the futures markets as the large funds quickly move money in and out of positions.
- "Sovereign wealth funds" based in Middle Eastern countries are reported to be investing as much as $40 billion in commodities.

THE RESEARCH

Full copies of all research studies cited here are available online at www.ethanol.org, located in the "Hot Topics" section through the link on the home page

Texas A&M University:
"The Effects of Ethanol on Texas Food and Feed"

Key Findings:

-- The underlying force driving changes in the agricultural industry, along with the economy as a whole, is overall higher energy costs, evidenced by $100 per barrel oil.

-- This research supports the hypothesis that corn prices have had little to do with rising food costs. Higher corn prices do have a small effect on some food items, but important food items like bread, eggs, and milk have high prices that are largely unrelated to ethanol or corn but instead correspond to fundamental supply/demand relationships in the world.

-- While some of the increase in retail food prices is due to farm-level price increases, there are likely a number of causes for higher retail food prices… One element to rising food prices that tends to be overlooked is the impact of higher fuel prices on retail food prices. The impacts of higher energy prices would be felt throughout several categories in the marketing bill, but primarily in packaging, transportation, and energy.

-- Speculative investment in commodity markets is accentuating the price movement due to supply shortfalls of some crops, is leading to more market volatility, and is pushing up the prices of commodities and food products.

-- Relaxing the Renewable Fuels Standard (RFS) would not result in significantly lower corn prices. This is due to the ethanol infrastructure already being in place and the generally positive economics for the industry. The ethanol industry has grown in excess of the RFS, indicating that relaxing the standard would not cause a contraction in the industry.

Federal Reserve Bank of Kansas City:
"What is Driving Food Price Inflation?"

-- Of every food dollar, about 20 cents goes to commodities like grain – less than half that of three decades ago.

-- Historically, food prices have surged during times of higher crude oil prices.

-- Marketing costs have risen sharply, consuming a greater share of the retail food dollar. Rising labor and energy costs have boosted the off-farm share of the food dollar steadily, from 67% in the 1970s to 80% today.

-- Labor costs have emerged as the biggest component of the retail food dollar, especially as people consume more processed and prepared foods and increase away-from-home eating.

-- Research shows that energy prices are quickly passed through to higher retail food prices, with retail prices rising 0.52% in the short-term for every 1% rise in energy prices. A 10% gain in energy prices could contribute 5.2% to retail food prices.

-- Rising global incomes, especially in developing countries, are changing food consumption patterns. For example, the per capita caloric intake of people in developed countries is 24% higher than people in developing countries, with most of the difference coming from protein consumption.

Food & Water Watch:
"Retail Realities: Corn Prices Do Not Drive Grocery Inflation"

Key Findings:

- The notion that higher corn prices justify hiking supermarket prices needs closer examination. Although corn prices have risen over the past year in part as a result of increased ethanol demand, the correlation between crop prices and retail grocery prices remains elusive.

- The study examined farmgate prices and retail food prices during four historical examples when there was a dramatic shift in corn prices. The findings – food prices were completely unresponsive to changes in corn prices; in many cases, retail meat and milk prices rose even when the farmgate corn price declined.

- The allegation that there is a causal relationship between farmgate prices and retail grocery prices is untrue.

- During the past decade, livestock producers, slaughterhouses, and grocery manufacturers benefited from artificially low corn prices but did not pass these savings on to consumers; now, food and meat processors are using the "ethanol smokescreen" to justify grocery price increases that are unlikely to decline when corn's historically volatile price falls.

- Whether the price of corn rises or falls, the price of meat and milk has generally trended upwards. This reflects the sticky pricing of retail food products – prices may rise when costs increase, but they do not fall when the cost of inputs falls.

- There is a disconnect between livestock operations' primary input cost (feed) and retail food prices, which contradicts claims by the meat and food processing industry that prices were increasing because of feed cost increases.

LECG, LLC:
"The Relative Impact of Corn and Energy Prices in the Grocery Aisle"

Findings:

- Energy prices have twice the impact on the Consumer Price Index for food than does the price of corn.

- While corn is an ingredient in only **some** grocery items – mainly livestock, dairy, and poultry – **all** grocery items are dependent upon energy for production, processing, packaging, and shipping.

- USDA: 81 cents of every food-cost dollar pays for expenses such as labor, packaging, advertising, transportation, and energy costs. On-farm expenses are less than 20% of the real cost of food.

Center for Agriculture & Rural Development, Iowa State University:
"The Impact of Ethanol Production on U.S. and Regional Gasoline Prices and on the Profitability of the U.S. Oil Refining Industry"

Findings:

- Growth in ethanol production has caused retail gasoline prices to be $.29 to $.40 per gallon lower than would otherwise have been the case.

- The availability of ethanol essentially increased the "capacity" of the U.S. refinery industry, and in so doing prevented some of the dramatic price increases often associated with an industry operating at close to capacity.

- The results suggest that this reduction in gas prices came at the expense of gasoline refiners' profits; ethanol production has a significant negative effect on profit margin of refiners in all five PADD regions across the U.S.

What the experts are saying:

"Oil and gasoline prices would be about 15% higher if biofuel producers weren't increasing their output."

-- Francisco Blanch, Merrill Lynch Commodity Strategist (Wall Street Journal 3/24/08)

"Certainly, that is a factor as we are seeing the rising food costs out there. It's not the factor, however. Energy is the big issue as we look at those food prices."

-- Ed Schafer, U.S. Agriculture Secretary (Reuters 4/16/08)

"We have an energy and a food problem. There are some relationships between them… We also think a significant part of the food problem relates not from biofuels but from simply the costs of energy in terms of fertilizer and in terms of transportation costs for food."

-- Condoleezza Rice, U.S. Secretary of State (Reuters 4/16/08)

"No doubt the ethanol boom has been a big contributor to the increases in the prices of corn and other grains, but prices for these crops are determined in the world market and other supply-demand factors throughout the world have affected them as well… Increased ethanol demand increases grain prices, but world population growth also increases grain prices… Yes, ethanol contributes to food price increases. Yes, ethanol competes with food for resources, but it's much less than half responsible. The ethanol industry is partly guilty, only semi-guilty, for increasing food prices."

-- Richard Perrin, University of Nebraska-Lincoln Agricultural Economics (Aurora News Register 4/10/08)

"In general, retail food prices are much less volatile than farm-level prices and tend to rise by a fraction of the change in farm prices. The magnitude of response depends on both the retailing costs beyond the raw food ingredients and the nature of competition in retail food markets. Ethanol's impact on retail food prices depends on how long the increased demand for corn drives up farm corn prices and the extent to which higher corn prices are passed through to retail."

-- Ephraim Leibtag, USDA Economist (AmberWaves, February 2008)

"Petitioning the EPA for a biofuel waiver will not have a meaningful impact on food prices or crop planting decisions of Virginia farmers. Virginia and the U.S. would be better served by taking actions to reduce demand for petroleum."

-- The Honorable Tim Kaine, Governor of the Virginia (4/15/08 letter to a state legislator who requested a petition to EPA to waive the Renewable Fuels Standard requirement in 2008)

american coalition for ethanol

For more information, contact the American Coalition for Ethanol (ACE)

Web: www.ethanol.org Phone: 605-334-3381

ACE is the grassroots voice of the U.S. ethanol industry, with nearly 1,600 members nationwide including farmers, corn and cellulosic ethanol producers, businesses that supply goods and services to the industry, agricultural associations, rural electric cooperatives, and other businesses, organizations, and individuals supportive of ethanol.